

Date

FACT SHEET

Virginia Water Protection (VWP) Individual Permit No. 19-2036
Wegmans Distribution Center, Hanover County, Virginia

DEQ has reviewed the application for the VWP Individual Permit No. 19-2036 and has determined that the project qualifies for an individual permit.

The following details the application review process and summarizes relevant information for developing the Part I - Special Conditions for permit issuance.

1. Contact Information:

Permittee Legal Name and Address:

Wegmans Food Markets, Inc.
Attn: Douglas Viets
1500 Brooks Avenue, P.O. Box 30844
Rochester, NY 14603-0844
doug.viets@wegmans.com
585-720-5777

Owner Legal Name and Address: See Section 1 of the Joint Permit Application (JPA)

Air Park Associates, L.P.
c/o Phil Dean or Bob Cox
2301 Wadebridge Road
Midlothian, VA 23113

Agent Legal Name and Address:

Timmons Group
Attn: Matt Neely
1001 Boulders Parkway, Suite 300
Richmond, VA 23225
matt.neely@timmons.com
804-200-6369

2. Processing Dates:

Received Application:	December 2, 2019
Received JPA No.:	December 2, 2019
Application Complete:	March 20, 2020
Permit Application Fee Deposited by Accounting:	February 21, 2020
Processing Deadline (120 days from Complete Application):	July 14, 2020

1 st Request for Additional Information Sent:	December 16, 2019
Final Response for Additional Information Received:	March 20, 2020
Notification of JPA sent to Local Government(s):	December 9, 2019
Request for comments sent to VDH, VDGIF, VDCR, VMRC:	December 9, 2019
Letters sent to Riparian Land Owners:	December 11, 2019
Draft Permit Package Issued:	March 26, 2020
Copy of Public Notice sent to DEQ Central Office:	March 30, 2020
Copy of Public Notice sent to Local Gov't and Planning District:	March 27, 2020
Public Notice Published:	March 31, 2020
End of 30-Day Public Comment Period:	April 30, 2020
Public Hearing Public Notice Published:	June 20, 2020
End of 45-Day 1 st Public Hearing Comment Period:	August 5, 2020
Received Verification of Publication:	April 13, 2020
Public Meeting or Hearing:	July 20, 2020

Due to significant comments received during the public hearing and comment periods regarding the preliminary jurisdictional determination (PJD) of Waters of the United States, which includes the state surface waters, at the proposed site issued by the U.S. Army Corps of Engineers (Corps) on February 11, 2020, DEQ sent a letter dated August 5, 2020 to the Corps requesting review of the PJD. As a result, the Corps conducted additional field work at the proposed site and issued a revised PJD on September 15, 2020. Revisions to the PJD resulted in increases in impacts to Waters of the United States, including state surface waters, from the proposed project. The applicant provided updated information to supplement the previously submitted application materials including updated impact maps and off-site alternatives analyses. As a result of the significant changes, DEQ revised the proposed permit and required a new public comment period for the revised proposed permit. Dates below document receipt and DEQ's review of the additional information.

Processing dates continued:

Request for Additional Information Sent:	August 11, 2020
Final Response for Additional Information Received:	October 7, 2020
Application Complete:	October 8, 2020
Request for comments sent to VDWR and VDCR:	September 17, 2020
2 nd Permit Application Fee Deposited by Accounting:	October 8, 2020
2 nd Draft Permit Package Issued:	Date
2 nd Copy of Public Hearing Notice sent to DEQ Central Office:	Date
2 nd Copy of Public Hearing Notice sent to Local Gov't and Planning District:	Date
2 nd Public Hearing Notice Published:	Date
End of 2 nd Public Hearing Comment Period:	Date
Received Verification of Publication:	Date
Public Meeting or Hearing:	Date
Permit Issued/Decision by SWCB:	Date

3. Project Location and Site Description:

The project location is proposed on a 219.6-acre site that is situated south of Ashcake Road (Route 657), northwest of Sliding Hill Road (Route 656), and east of Egypt Road (Route 741) in Hanover County, Virginia. The site is surrounded by agricultural and forest land, as well as Ashcake Road to the north, residential development and forest, as well as Sliding Hill Road to the east and south, and the Hanover County Municipal Airport and industrial/commercial development to the west. The project lies within the Pamunkey River Watershed. The proposed project location is provided in Section 3.1 of the application.

City/County: Hanover

Waterbody: Unnamed tributaries to Totopotomoy Creek, Kersey Creek, and Campbell Creek

Basin: York River

Subbasin: Pamunkey

Section: 3

Class: III

Special Standards: None

HUC: 02080106

Latitude & Longitude: 37.711605, -77.42552

U.S.G.S. Quadrangle: Yellow Tavern

State Watershed No.: YO30

The site is comprised of all or a portion of 22 separate tax parcels owned by Airpark Associates and generally consists of mid to late successional mixed pine-hardwood forest, as described in Section 3.2 of the application. The site consists of generally flat topography ranging from topographic highs of approximately 200 feet above mean sea level (AMSL) in the central portion of the site sloping downward in all directions to topographic lows of approximately 189 feet AMSL along the western site boundary.

The PJD from the Corps dated October 30, 2019 and initially revised on February 11, 2020 indicated that the site consists of 16.15 acres of palustrine forested (PFO) wetlands, 0.55 acre of palustrine emergent (PEM) wetlands, and 0.336 acre of palustrine scrub-shrub (PSS). A small amount of jurisdictional ditches (0.242 acre) are also onsite.

Due to significant comments received during the public hearing and comment periods regarding the PJD of surface waters at the proposed site issued by the US Army Corps of Engineers (Corps) on February 11, 2020, DEQ sent a letter dated August 5, 2020 to the Corps requesting review of the PJD. As a result, the Corps conducted additional field work at the proposed site and issued a revised PJD on September 15, 2020. Furthermore, an additional PJD for areas associated with offsite road improvements and utility tie-ins was requested by the applicant on September 21, 2020 and confirmed by the Corps on September 24, 2020. Based on the revised PJD information for the site from the Corps dated September 15, 2020 and September 24, 2020, the site consists of 28.708 acres of palustrine forested (PFO) wetlands, 0.585 acre of palustrine emergent (PEM) wetlands, and 0.336 acre of palustrine scrub-shrub (PSS). A small amount of jurisdictional ditches (0.248 acre) are also onsite. Wetlands within the project area persist in the natural depressions within the forested areas and alongside the large drainage system that bisects the southern portion of the site. No stream channels

were delineated on site. Additional information about the surface water impacts located within the project area is located below in Section 7.

4. Application and Proposed Impacts

The application requests a permit for the total impact to 14.85 acres of surface waters, consisting of the following.

- Permanent fill impacts are to 12.99 acres of palustrine forested (PFO) wetland, 0.23 acre of palustrine emergent (PEM) wetland, and 0.14 acre of jurisdictional ditch.
- Secondary impacts, due to diversion of surface water, are to 1.44 acres of palustrine forested wetland and 0.02 acre of jurisdictional ditch.
- Temporary impacts are to 0.03 acre of palustrine emergent wetland.

The application for this project consists of the Joint Permit Application (JPA) received on December 2, 2019, additional information submitted by the applicant on December 13, 2019, December 20, 2019, December 23, 2019, February 21, 2019, March 12, 2020, March 16, 2020 and March 20, 2020 including all associated appendices, and all other information submitted by the applicant to DEQ. Additionally, revised project information was submitted by the applicant on September 15, 2020, September 22, 2020, September 28, 2020, October 7, 2020 and October 8, 2020 including all associated appendices. All submitted information will be hereto referred to as the “application”. The original application received on December 2, 2019 was submitted on behalf of Hanover Economic Development for Project Tiger. Since that time, the applicant information has been updated to Wegmans Food Markets, Inc.

5. Project Purpose and Need:

As described in Section 4.0 of the application, the purpose of the project is to “provide a site that will serve as a secure regional grocery distribution center that will (a) serve existing retail locations, (b) relieve transportation burdens from existing supply centers, and (c) provide a base of support to serve future retail locations in the mid-Atlantic region.” The applicant states that the project is needed to develop a new regional distribution center that can serve current and planned stores in the mid-Atlantic region in a “logistically responsible and cost-efficient manner.”

As described in Section 5.1 of the application, the proposed facility components include three phases of development on site. Phase I construction of an approximately 1.1 million contiguous square feet (sq. ft) facility that will house a dry warehouse, refrigerated warehouse, return center, food manufacturing facility, and offices, with the ability to expand with future growth, as well as parking and staging areas for tractor trailers, parking for associates, and ancillary support buildings (i.e. fleet maintenance, dispatch and site security). Appurtenant facilities such as parking and staging areas for tractor trailers, parking for associates, and ancillary support buildings (i.e. returning trailer cleanout and site security) are necessary for operations. A near future Phase II expansion to approximately 1.3 million square feet includes expansion of the dry warehouse and the temperature controlled warehouse. Phase III - future development/expansion of the distribution center will be constructed in accordance with county zoning which allows for a maximum buildout of 1.7 million square feet.

The applicant currently operates two Northeast distribution centers located in Pottsville, Pennsylvania and Rochester, New York. A typical regional distribution center can efficiently serve 45-50 retail locations. The desired goal as stated by the applicant is for each distribution center to serve 45 stores. Currently, the Pottsville Distribution Center is serving 54 stores in the following locations: Pennsylvania (28), New Jersey (9), Massachusetts (6), Maryland (8), Virginia (12), and North Carolina (1), and is operating at 20% overcapacity. The Rochester Distribution Center serves 47 stores within New York and is operating at 4% overcapacity. Section 2.0 of the application includes an explanation that when a regional distribution facility nears 90% capacity, the facility may not be able to meet store growth or unexpected fluctuations in demand. Exceeding 95% facility capacity is not ideal because free space is needed to accommodate item changes and maintain efficient day-to-day operations. At 100% capacity, a facility would result in gridlock with no room to receive supplier deliveries.

Following current trends, Wegmans predicts that they will outgrow the existing Pottsville Distribution Center within the next five years. As depicted on the Wegmans “Here we grow” figure provided on March 16, 2020, five new stores are planned to open in North Carolina as well as six stores in the D.C. metro area within the next five years. The applicant predicts that with the current distribution centers, they will not be able to serve the increased retail locations; therefore, a new regional distribution center is needed that can efficiently supply the anticipated number of retail locations in the rapidly growing mid-Atlantic market.

In addition to relieving demand on the existing distribution centers, the proposed Hanover County Distribution Center would also serve to decrease distance, time, and costs associated with transportation to retail stores in the Mid-Atlantic region. The Pottsville distribution center currently serving these areas is approximately 370 road miles from the Virginia Beach location and approximately 480 road miles from the planned West Cary, North Carolina location. The distance from Hanover County, VA to Raleigh, NC is approximately 187 miles. A Hanover County Distribution Center would reduce trip miles to the North Carolina store locations by more than 290 miles one way. Reduced distance from a distribution center to a retail store results in a significant reduction in fuel and operational costs associated with each trip. Deliveries for perishable items are often scheduled daily to ensure the highest quality and longest shelf life. Long-distance deliveries can require longer lead times, which can result in unpredictable impacts from weather, shorter shelf life of perishable products, and the potential for increase of damage to sensitive products and loss of product. Servicing northern Virginia stores from the Hanover Distribution Center also reduces the number of trips, trucks originating from the Pottsville Distribution Center need to make through one of the most heavily congested areas of traffic in the nation, the Washington D.C. metro area.

Based on information provided by the applicant regarding lack of adequate capacity at the existing distribution center to accommodate several existing and planned retail locations in the D.C. metro area, Virginia, and North Carolina, and proximity of the current distribution center from these locations, staff has concluded that the applicant has sufficiently demonstrated the need to construct an additional distribution center.

6. Avoidance and Minimization Efforts:

9VAC25-210-60 B.1.g of the Virginia Water Protection Permit Program Regulation requires that applications include “an alternatives analysis for a proposed project detailing the specific on-site and off-

site measures taken during project design and development to first avoid and then minimize impacts to surface waters to the maximum extent practicable in accordance with the “Guidelines for Specification of Disposal Sites for Dredged or Fill Material, 40 CFR Part 230.” Section (a) of 40 CFR Part 230 Subpart B, known as the Clean Water Act Section 404(b)(1) Guidelines, states that “no discharge of dredged or fill material shall be permitted if there is a *practicable* alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.” An alternative is considered *practicable* if it is “available and capable of being done taking into consideration cost, existing technology, and logistics in light of overall project purposes.”

The application provided documentation demonstrating the evaluation of several alternatives to the proposed project including a no-build alternative, four off-site alternatives, as well as layouts of the distribution center at the preferred location.

6.1 Off-Site Alternatives

The application explains that the applicant considered approximately a dozen locations in Virginia and North Carolina. The Richmond metro area was determined by the applicant to be the center of the retail distribution needs. The applicant specifically identified Hanover County as the location for a new regional distribution facility that best serves the needs of the existing and planned retail stores and determined that Hanover County, Virginia increases logistical efficiency due to the ease of access to I-95, allowing the center to not only serve stores in NC and southern Virginia, but also providing a better source of distribution for stores located in northern Virginia (Fredericksburg, Potomac, Alexandria, Lake Manassas, Chantilly, Fairfax, etc.) and the D.C. metro area. Servicing Northern Virginia stores from the Hanover distribution center also reduces the number of trips, trucks originating from the Pottsville Center need to make through one of the most heavily congested areas of traffic in the nation, the DC Metro Area. This helps reduce the risks associated with perishable food items, while enhancing safety by decreasing road hours for operators. Upon commencement of operations, the Hanover Distribution Center would immediately begin serving 24 stores in the D.C. metro area, Virginia, and North Carolina.

According to the applicant, the Metro Richmond area does not provide the same ease of access to the portions of I-95 that facilitate the logistics train to the Northern Virginia stores. The application proposes five build alternatives in Hanover and the Town of Ashland for development as a regional distribution facility, referred to as Alternatives 1, 2, 3, 4, and preferred (also known as the Air Park site) as most supporting of the project purpose and documents an off-site alternative analysis of these sites. The applicant also analyzed a No Action alternative. A detailed Alternative Analysis, describing how the applicant evaluated and eliminated alternatives, can be found in Section 5.0 of the JPA package dated November 2019 and additional information provided through October 8, 2020. The initial application included consideration of a No Action alternative and an evaluation of two (2) alternative sites, referred to as Alternatives 1 and 2. The applicant provided alternatives analysis for sites referred to as Alternatives 3 and 4 in response to a request by DEQ to provide additional off-site alternative analyses in order for staff to determine if the proposed site meets the Least Environmentally Damaging Practicable Alternative (LEDPA).

Screening factors that were analyzed by the applicant in the offsite analysis include:

1. Primary site access within 3 road miles of Interstate 95;

2. Must efficiently serve current and future grocery stores in the Region;
3. Minimized wetland/stream impact^a and mitigation costs;
4. Can accommodate at least 130 acres of correctly configured construction pad^b,
5. No potential stream impacts;
6. No potential of RPA impacts;
7. Availability of viable alternate routes (in the event of disruption of the primary route);
8. Properly zoned;
9. Access to connector/dissipater roads without need for improvement;
10. Sufficient labor force;
11. Avoids routing through congested areas to reach primary roads;
12. Ease of utility access (sewer, power, water);
13. No potential threatened and endangered species conflict; and
14. Sufficient amount of mitigation credits in the service area.

^a The application states that a wetland delineation and perennial stream assessment/resource protection area determination was not available or feasible to be performed for all sites evaluated during the alternatives analysis; therefore, the aquatic resources for Alternative Sites 1, 2, and 4 were approximated based on National Wetland Inventory (NWI) and National Hydrography Dataset (NHD) mapping. A surface water delineation was used for evaluation of surface water impacts on Alternative 3 and the preferred site.

^b The application states that in designing the Hanover Distribution Center campus, the best design and operational practices from previous and existing facilities were incorporated including cross docking and flow through product handling as described below.

The proposed distribution center layout facilitates the “Flow Through” of product, which allows the movement of product through the warehouse without ever having to go into storage resulting in (a) a smaller warehouse footprint due to limiting the amount of product being stored in the warehouse. (In many cases this could be more than 40% of meat and produce); (b) decreased handling of product; and (c) increased freshness to the customer.

The proposed layout also includes retail cross docking. Retail cross docking receives items from different suppliers and classify them into departing trucks for various destinations. A figure provided on March 12, 2020 indicates a schematic portrait of cross docking for various items that depart from a facility for separate destinations. By properly implementing operational practices such as cross docking, many benefits can be brought about for organizations including, decreased storage cost, reduced fix price of the storage area, reduced shipment lead time, and increased customer satisfaction via fast delivery.

To implement cross docking and flow through, the application explains that a L-shaped campus is needed to allow for maximized efficiency in day to day operations, which in the long-term, will provide an increased profit margin, while also reducing required building footprints by eliminating the need for redundant spaces. The applicant states that a different layout would result in a less efficient operation as well as require a larger building footprint.

The applicant also states that an L-shaped campus allows:

- (a) The employee parking and administrative areas to be positioned centrally to the dry and perishable buildings which enables a common entry point, shared employee areas, a common area for equipment parking, maintenance and offices. Other layouts result in having to duplicate several of these areas to cut down on the distance employees would need to travel;
- (b) Employee parking and truck traffic are kept apart;
- (c) The ability for a common outbound trucking operation that is shared for both buildings in terms of tractor and trailer parking, trailer stripping, and other common requirements. Moving trailers throughout the site requires less miles and less fuel because of the L-Shaped common shared trucking concourse as compared to an “in-line” design; and
- (d) Greater ability to expand each building in the future if this should ever be a requirement.

The applicant determined the Air Park site the preferred site due to a combination of factors including: proximity to I-95, logistical efficient to serve current and future stores, ecological factors, mitigation cost and credit availability, zoning, access (required offsite road improvements, avoidance of congested areas), ease of utility access, and cost.

6.2 Alternatives of 1, 2, 3, 4, and No Action

Staff closely reviewed the application to evaluate whether the application demonstrated that the applicant’s proposed site meets LEDPA, satisfying the requirements of 9VAC25-210-80, taking into account cost, existing technology, and logistics in light of overall project purposes. Each of the five build alternatives and the no-build alternative presented in the application were evaluated under the following criteria:

1. Meeting the *Project Purpose and Need*
2. *Surface Water Impacts*
3. Practicable after taking into consideration *Costs*
4. Practicable after taking into consideration *Logistics*
5. Practicable after taking into consideration *Technology*

An alternative is considered *practicable* if it is “available and capable of being done taking into consideration cost, existing technology, and logistics in light of overall project purposes.”

Purpose and Need

The project purpose as stated in the application is “to provide a site that will serve as a secure regional grocery distribution center that will “(a) serve existing retail locations, (b) relieve transportation burdens from existing supply centers, and (c) provide a base of support to serve future retail locations in the mid-Atlantic region.” The applicant has explained that a new regional distribution center is needed in Hanover County to “serve current and planned stores in the mid-Atlantic region in a logistically responsible and cost-efficient manner.” More details about the purpose and need are summarized in Section 5 above.

Surface Water Impacts

Surface water impacts are evaluated based on the surface water features and activities that require a VWP Permit in accordance with 9 VAC 25-210-10 et seq. This evaluation does not include activities or features outside the authority of the VWP Program. Because not every site has a Jurisdictional Determination

from the Corps, nor is it not practical for an applicant to conduct a surface water delineation for all alternatives, DEQ staff confirmed the accuracy of the information provided by the applicant from National Wetland Inventory (NWI) and National Hydrography Dataset (NHD) mapping to determine if the applicant's assumptions in approximating the aquatic resources for Alternative Sites 1, 2, and 4 were reasonable. A confirmed Jurisdictional Determination from the US Army Corps of Engineers was used for evaluation of surface water impacts on Alternative 3 and the preferred site.

Cost

Cost is evaluated on the premise of what is a reasonable expense for this type of construction project, whether the project cost is substantially greater than the costs normally associated with the particular type of project under consideration, and if an alternative is unreasonably expensive to the applicant, the alternative is not practicable.

Logistics

Logistics of each alternative is evaluated based on the ability to successfully complete the project when taking into consideration timing, constructability, land acquisition, project constraints, and safety hazardous.

Technology

Technology is evaluated by considering whether the technology is currently available to implement each of the alternatives.

Based upon staff's review of the application, the preferred site, although having more wetland impacts than other alternatives evaluated in the application, represents the LEDPA as it is the only practicable alternative when considering cost, logistics, and technology in light of the project purpose. A summary of the details considered in this evaluation is provided in the section below, and additional details can be reviewed in the VWP Permit file 19-2036.

6.3 Alternative 1 (Flipppo Site)

Alternative 1 is located southwest of the intersection of Interstate 95 and Kings Dominion Highway (Route 30) and is approximately 250 acres in area. The property is bisected by Route 1, and the evaluated alternative is on the eastern portion of the property and consists of a managed pine plantation. Alternative 1 is zoned as A-1 (agricultural), and site rezoning or a conditional use permit would be needed to construct the project at the site. The construction of sewer, waterline, and electricity infrastructure to the interior of the site would be necessary as well as off-site road improvements. As included in the application, a sanitary trunk sewer extension along Little River and boring under I-95 for a sanitary main extension would be necessary in order to develop this site.

6.3.1 Purpose

Because the applicant has explained that a new regional distribution center is needed in Hanover County to "serve current and planned stores in the mid-Atlantic region in a logistically responsible and cost-efficient manner", Alternative 1 meets the purpose as provided in the application.

6.3.2 Surface Water Impacts

The application states that approximately 15 acres of jurisdictional wetlands would be permanently impacted as a result of project implementation at Alternative 1 making the surface water impacts at Alternative 1 comparable to the preferred site. Therefore, surface water impacts were not a significant factor in evaluating the applicant's proposed LEDPA. Additionally, the applicant conducted a preliminary review of the US Fish and Wildlife Service, Virginia Department of Conservation and Recreation, and Virginia Department of Wildlife Resources databases for threatened and endangered species at the site. Results indicated that the dwarf wedgemussel and the Atlantic sturgeon have been confirmed within 2 miles of Alternative 1.

6.3.3 Cost

The applicant provided information associated with cost to purchase the land and estimated mitigation credit cost. The application also stated that Alternative 1 would require the use of unclassified rural collector roads SR-602 (Mt. Hope Church Road), SR-689 (Taylorsville Road), and Short Cut Road in order to access Route 1 and Route 30 before the Route 30/I-95 interchange. These roads would require significant and costly improvements in order to withstand prolonged tractor trailer use. Due to its current use as pine plantation this alternative would likely require a minimum of 130+ acres of tree clearing and the construction of sewer, waterline, and electricity infrastructure to the interior of the site, further adding to overall project costs and increased project timeline. DEQ requested additional information associated with these costs in order to assess if the cost to construct a distribution center associated with Alternative 1 was practicable. The applicant provided an explanation of site improvements necessary and associated cost estimates based on the total assessed value of the property, anticipated mitigation costs associated with surface water impacts, a sanitary trunk sewer extension along Little River, the boring of a sanitary main extension beneath I-95, offsite easement acquisitions, and the lost opportunity costs to the applicant due to the anticipated 18 months to acquire the offsite easement. The cost to prepare Alternative 1 for development is estimated to be \$18.5 million. This cost does not include the construction costs of the distribution center itself. As the cost to prepare the preferred site is \$6.23 million, construction of the project at Alternative 1 is estimated to be 3 times the cost of constructing at the preferred site. The applicant concludes that this alternative is not practicable considering cost.

6.3.4 Logistics

The applicant states that while site access and road infrastructure improvements are sub-par, size and the proximity to Interstate 95 make Alternative 1 a viable option. However, the potential exists for increased congestion and reduced traffic safety when accessing the interstate, as the site is near the Kings Dominion theme park and would likely utilize the same access junction to I-95 as patrons and employees entering/exiting the park via Route 30. The applicant did not identify any logistical challenges associated with construction of the distribution center associated with Alternative 1. Alternative 1 is practicable in terms of logistics.

6.3.5 Technology

The applicant did not identify any technological challenges associated with construction of the distribution center associated with Alternative 1. Alternative 1 is practicable in terms of technology.

6.4 Alternative 2 (Blenheim Site)

Alternative 2 is located off of Hickory Hill Road east of Interstate 95 and Ashland, Virginia. Most of the site consists of mixed pine hardwood forest, as well as clear cut land. The site consists of one parcel totaling approximately 506 acres and is zoned as A-1 (agricultural), and as such a conditional use permit or rezoning proffer would be needed. The construction of sewer, waterline, and electricity infrastructure to the interior of the site would be necessary as well as off-site road improvements. A sanitary sewer pump station and force main would be necessary in order to develop this site. Additionally, boring under I-95 would be necessary for the extension of a force main and water main. The applicant has also determined that an extension of a water main along Hickory Hill Road and significant road improvements at Ellet's Crossing is necessary to develop this site.

6.4.1 Purpose

Because the applicant has explained that a new regional distribution center is needed in Hanover County to "serve current and planned stores in the mid-Atlantic region in a logistically responsible and cost-efficient manner." Alternative 2 meets the purpose as stated in the application.

6.4.2 Surface Water Impacts

The application states that construction of the project at Alternative 2 would impact approximately 16.4 acres of wetlands and 2,366 linear feet of stream. The applicant conducted a preliminary review of the US Fish and Wildlife Service, Virginia Department of Conservation and Recreation, and Virginia Department of Wildlife Resources databases for threatened and endangered species at the site. Results indicated that the dwarf wedgemussel and the Atlantic sturgeon have been confirmed within 2 miles of Alternative 2.

6.4.3 Cost

The applicant provided information associated with cost to purchase the land and estimated mitigation credit cost. DEQ requested additional information associated with these costs in order to assess if the cost to construct a distribution center associated with Alternative 2 was practicable. The applicant provided an explanation of site improvements necessary and associated cost estimates based on the total assessed value of the property, anticipated mitigation costs associated with surface water impacts, sanitary pump station and force main, the boring of a force main extension beneath I-95, road improvements to Ellet's Crossing and Hickory Hill Road, 12" water main extension along Hickory Hill Rd, water main extension boring beneath I-95, and the lost opportunity costs associated with the estimated 9 months it would take to have the property rezoned. The cost estimate concludes that Alternative 2 would cost \$36.8 million. This cost does not include the construction costs of the distribution center itself. This cost does not include the construction costs of the distribution center itself. As the preferred site is projected to cost \$6.23 million, construction of the project at Alternative 2 is estimated to be 5 times the cost of constructing at the preferred site. The applicant concludes that this alternative is not practicable considering cost.

6.4.4 Logistics

The application explains that construction at Alternative 2 presents some logistical challenges. Perennial streams throughout site results in approximately 9.6 acres within the Resource Protection Area regulated and protected by the Chesapeake Bay Preservation Act which cannot be developed without local government approval which may not be granted. Additionally,

Alternative 2 is bisected by an overhead electrical easement. The distribution facility has been designed in an “L-shaped” layout as described above. In order to utilize “L-shaped” design on Alternative 2, the layout would have to be placed on either side of a set of power lines and their associated easement that bisects the property. According to the applicant it is not feasible to redirect, develop permanent structures within, or otherwise alter the utility easement. Additionally, the facility cannot be separated or disconnected in order to be located on opposite sides of the power lines. Separating the facility would decrease productivity and operational efficiency while requiring an increased area of disturbance due to additional and duplicated infrastructure (i.e. roadways, parking, stormwater, etc.) facilities. The required components of the distribution center cannot be located east of the power lines without intruding into the utility easement (roads, security fencing, parking, stormwater infrastructure, etc.), extending offsite, or both. The applicant concludes that because of these challenges, Alternative 2 is not practicable in terms of logistics to construct the proposed project on this site.

6.4.5 Technology

The applicant did not identify any technological challenges associated with construction of the distribution center associated with Alternative 2 in comparison to the preferred site. Alternative 2 is practicable in terms of technology.

6.5 Alternative 3 (Archie Cannon Site)

Alternative 3 is in the Town of Ashland west of I-95. Most of the site consists of mixed hardwood-pine forest and agricultural land. The site consists of 3 parcels totaling approximately 297 acres zoned M-1. The construction of sewer, waterline, and electricity infrastructure to the interior of the site would be necessary as well as off-site road improvements. The applicant has determined that a new traffic signal at the intersection of Archie Cannon Drive and Route 1, extension of Hill Carter Parkway, and relocation of sanitary sewer would be necessary.

6.5.1 Purpose

The application states that because Alternative 3 is a long and relatively narrow site, the required distribution center configuration would span the entire width of the property and making onsite alternatives limited to the inability to rotate or shift planned site design. Limitation in orientation and size prohibits this parcel from the Applicant meeting their future expansion goals, failing to meet their Purpose and Need.

6.5.2 Surface Water Impacts

The application states that construction of the project at Alternative 3 not including stormwater management facilities would impact approximately 0.5 acre of wetland and 1,953 linear feet of stream. Potential surface water impacts were determined based on an existing surface water delineation available to the applicant. The applicant conducted a preliminary review of the US Fish and Wildlife Service, Virginia Department of Conservation and Recreation, and Virginia Department of Wildlife Resources databases for threatened and endangered species at the site. Results indicated that the dwarf wedgemussel and yellow lance have been confirmed within 2 miles of Alternative 3.

6.5.3 Cost

The applicant provided information associated with cost to purchase the land and estimated mitigation credit cost. DEQ requested additional information associated with these costs in order to assess if the cost to construct a distribution center associated with Alternative 3 was practicable. The applicant provided an explanation of site improvements necessary and associated cost estimates based on the total assessed value of the property, anticipated mitigation costs associated with surface water impacts, the required extension to Hill Carter Parkway, signalization of Archie Cannon Dr, sanitary sewer relocation, and the lost opportunity costs associated with the estimated 9 months it would take to have the property rezoned. The cost estimate concludes that Alternative 3 would cost \$27.9 million. This cost does not include the construction costs of the distribution center itself. As the preferred site is projected to cost \$6.23 million, construction of the project at Alternative 3 is estimated to be 4.5 times the cost of constructing at the preferred site. The applicant concludes that this alternative is not practicable considering cost.

6.5.4 Logistics

The applicant explains that because of the following reasons Alternative 3 presents logistical challenges and was determined to not be practicable:

- The site is situated within 3 road miles of an interchange to I-95, however accessing the site from the closest interchange (I-95/Route 54) would require tractor trailers being routed through the Town of Ashland, which creates significant congestion and public safety concerns. The next closest interchange is approximately 6 miles to the north (I-95/Route 30). However, the potential exists for increased congestion and reduced traffic safety when accessing the interstate from that location, as it is the primary interchange for the Kings Dominion theme park.
- John M. Gandy Elementary School is adjacent to the site, just to the south of Archie Cannon Drive. This location would effectively require distribution center trucks to share the same roads with school traffic (buses and personal vehicles daily), creating further public safety risks.
- Alternative 3 does not allow for the future expansion of the distribution center as depicted on the preferred alternative. Because of this the Applicant will not be able to achieve their future goals for the project.
- The town of Ashland will no longer allow this location to be used as a distribution center and trying to re-zone this location is not practicable due to the applicant's timeline. Rezoning efforts would be both timely and costly to the Applicant with no guarantees that the rezoning could be accomplished, making the Air Park site a much more appealing location as it is already properly zoned. Additionally, the recent zoning ordinance changes by the town of Ashland make the proposed distribution center use incompatible with the current zoning designation with no likelihood of changing.

6.5.5 Technology

The applicant did not identify any technological challenges associated with construction of the distribution center associated with Alternative 3. Alternative 3 is practicable in terms of technology.

6.6 Alternative 4 (Graymont Site)

Alternative 4 is located off a rural minor collector road west of I-95 in Hanover County. Most of the site consists of mixed hardwood-pine forest, agriculture, and a single residence. The site is comprised of 2 tax parcels totaling approximately 197 acres and is zoned M-1. The applicant has determined that because of the site topography a retaining wall must be constructed for the site to be developable. Additionally, the applicant has determined that a sanitary sewer pump station and force main as well as significant improvements at Ellet's Crossing is necessary to construct at this site.

6.6.1 Purpose

The application states that because Alternative 4 offers an extremely tight fit at best with regards to the distribution center layout and would not allow for further expansion of the distribution center as depicted on the preferred alternative. Because of this the applicant will not be able to achieve their future goals for the project.

6.6.2 Surface Water Impacts

The application states that construction of the project at Alternative 4 (minus stormwater facilities) would impact approximately 1.1 acres of wetland and 689 linear feet of stream. Potential surface water impacts were determined based on an existing surface water delineation available to the applicant. Review of the US Fish and Wildlife Service, Virginia Department of Conservation and Recreation, and Virginia Department of Wildlife Resources database indicated the potential for the federally endangered Dwarf Wedgemussel (*Alasmidonta heterodon*) and federally threatened Yellow Lance (*Elliptio lanceolata*). The applicant hired Three Oaks Engineering to conduct a mussel survey within the South Anna River at Alternative 4. The study concluded that "While high quality habitat is present in the South Anna River, and there is potential for additional species not found during these efforts to occur there, the target federally listed species were not found during these efforts."

6.6.3 Cost

The applicant provided information associated with cost to purchase the land and estimated mitigation credit cost. DEQ requested additional information associated with these costs in order to assess if the cost to construct a distribution center associated with Alternative 4 was practicable. The applicant provided an explanation of site improvements necessary and associated cost estimates based on the total assessed value of the property, anticipated mitigation costs associated with surface water impacts, sanitary sewer and pump station, a site retaining wall, and road improvements to Ellet's Crossing. The cost estimate concludes that Alternative 4 would cost \$15.3 million. This cost does not include the construction costs of the distribution center itself. As the preferred site is projected to cost \$6.23 million, construction of the project at Alternative 4 is estimated to be 2.5 times the cost of constructing at the preferred site. The applicant concludes that this alternative is not practicable.

6.6.4 Logistics

The applicant explains that because of the following reasons Alternative 4 presents logistical challenges:

- The primary site access would likely be routed to the Route 30/I-95 interchange, approximately 4 miles to the north. Secondary access would be routed approximately 4 miles south through the Town of Ashland. Both routes are further from I-95 interchanges than desired and require trucks to spend more time in frequently congested areas. Additionally, a rural minor collector road and an unclassified rural local road would require costly road improvements as discussed in the previous section.
- Alternative 4 offers an extremely tight fit with regards to the distribution center layout and would not allow for further expansion of the distribution center as depicted on the preferred alternative. Because of this the Applicant will not be able to achieve their future goals for the project.

6.6.5 Technology

The applicant did not identify any technological challenges associated with construction of the distribution center associated with Alternative 4. Alternative 4 is practicable in terms of technology.

Alternative Site Construction Cost Estimates Provided by the Applicant

Updated Estimated Cost Analysis (9/28/2020)

Site	Flippo	Blenheim	Archie Cannon	Graymont	Air Park
Wetland and Waters Impacts	app. 15 acres	app. 16.4 acres & app. 2,366 lf stream	app. .5 acres & 1,953 lf stream	app. 1.1 acres and 689 lf stream	14.8 acres
Estimated Development Cost					
Mitigation Cost	\$ 1,050,000.00	\$ 1,857,800.00	\$ 620,900.00	\$ 283,700.00	\$ 1,029,350.00
Assessed Value	\$ 2,005,100.00	\$ 1,865,700.00	\$ 9,326,600.00	\$ 1,993,000.00	\$ 4,406,000.00
Extension Hill Carter Parkway	\$ -	\$ -	\$ 10,900,000.00	\$ -	\$ -
Signalization of Archie Cannon Dr/RT	\$ -	\$ -	\$ 500,000.00	\$ -	\$ -
Sanitary sewer relocation	\$ -	\$ -	\$ 750,000.00	\$ -	\$ -
Sanitary Pump Station and FM	\$ -	\$ 1,800,000.00	\$ -	\$ 1,500,000.00	\$ -
Site Retaining Wall	\$ -	\$ -	\$ -	\$ 2,800,000.00	\$ -
Sliding Hill Road Improvements (curve softening)	\$ -	\$ -	\$ -	\$ -	\$ 500,000.00
New Turn and Acceleration Lane Sliding Hill Road	\$ -	\$ -	\$ -	\$ -	\$ 290,000.00
Sanitary Trunk Sewer Extension Along Little River (14,000LF @ \$200/LF)	\$ 2,800,000.00	\$ -	\$ -	\$ -	\$ -
I-95 Bore for Force Main Extension (700LF @ \$500/LF)	\$ -	\$ 350,000.00	\$ -	\$ -	\$ -
I-95 Bore for Sanitary Main Extension (700LF @ \$750/LF)	\$ 525,000.00	\$ -	\$ -	\$ -	\$ -
Ellet's Crossing and Hickory Hill Road Improvements (Blenheim ~9,500 LF @ \$2,500/LF)(Graymont ~3,500LF @ \$2,500)	\$ -	\$ 23,750,000.00	\$ -	\$ 8,750,000.00	\$ -
12" Water Main Extension Along Hickory Hill Road (6,700 LF @ \$150/LF)	\$ -	\$ 1,005,000.00	\$ -	\$ -	\$ -
I-95 Bore for Water Main Extension (700LF @ \$500/LF)	\$ -	\$ 350,000.00	\$ -	\$ -	\$ -
Offsite Easement Acquisition (8,300LF @ \$60/LF)	\$ 498,000.00	\$ -	\$ -	\$ -	\$ -
Lost Cost Savings Due Required Rezoning (est. 39 weeks X \$150k/week)*	\$ 5,850,000.00	\$ 5,850,000.00	\$ 5,850,000.00	\$ -	\$ -
Lost Cost Savings Due to Offsite Easement Acquisition (est. 78 weeks X \$150k/week)*	\$ 11,700,000.00	\$ -	\$ -	\$ -	\$ -
Est.Cost Total:	\$ 18,578,100.00	\$ 36,828,500.00	\$ 27,947,500.00	\$ 15,326,700.00	\$ 6,225,350.00
Difference:	\$ 12,352,750.00	\$ 30,603,150.00	\$ 21,722,150.00	\$ 9,101,350.00	
Order of magnitude expense to preferred site	3.0	5.9	4.5	2.5	

* The Flippo site would require the acquisition of offsite easements. Based on this requirement, the total lost cost savings is based on the longer line item which is estimated to take 9 months longer, and not the combined lost cost savings of easement acquisition and rezoning, since they can run concurrently.

6.7 No Action

The No Action alternative would not impact any surface waters, would not encounter any logistical or technological issues associated with construction, and would not impose any construction costs. The No Action alternative is not consistent with the applicant's purpose and need of the project to serve existing

retail locations, relieve transportation burdens from existing supply centers, and provide a base of support to serve future retail locations in the mid-Atlantic region. The application included an evaluation of delaying investment in a new facility through revisions to Standard Operating Procedures (SOP) changes and expanding utilization of the existing facilities. However, the applicant determined that the Pottsville Distribution Center constraints would require expansion of the existing facility to meet new retail store demands. Since mid-Atlantic growth is expected to continue, expanding this facility would result in increased transportation costs of supplying stores in the mid-Atlantic Region. In addition, store service and product quality would be at risk due to the long distances and transportation costs associated with expanding stores to the south that would exceed all other alternatives evaluated. The No Action alternative is not considered practicable because it does not meet the purpose and need of the project.

6.8 Preferred Site (Air Park Site)

The approximately 219.6-acre site is in Hanover County southwest of the intersection of Ashcake Road and Sliding Hill Road. The site is surrounded by agricultural and forest land, as well as Ashcake Road to the north, residential development and forest, as well as Sliding Hill Road to the east and south, and the Hanover County Municipal Airport and industrial/commercial development to the West. In order for the distribution center to most efficiently serve both current and future retail stores in the Mid-Atlantic Region, the applicant determined the project must be located in Hanover County within close proximity to I-95 to facilitate the logistics train to Northern Virginia stores.

6.8.1 Project Purpose

The application explains that the preferred site and Least Environmentally Damaging Practicable Alternative is consistent with the project purpose and also allows for future expansion of the site.

6.8.2 Surface Water Impacts

The application states that the preferred site and Least Environmentally Damaging Practicable Alternative will permanently impact 14.82 acres of surface waters and temporarily impact 0.03 acre of surface waters.

6.8.3 Cost

The applicant provided information associated with cost to purchase the land and estimated mitigation credit cost at the preferred site and Least Environmentally Damaging Practicable Alternative. DEQ requested additional information associated with these costs in order to assess the construction cost of the preferred site compared to Alternatives 1, 2, 3, and 4. The applicant provided cost estimates based on the total assessed value of the property, anticipated mitigation costs associated with surface water impacts, the required Sliding Hill Road improvements (curve softening) and a new turn lane and an acceleration lane on Sliding Hill Road. The preferred site costs approximately 66% less than Alternative 1, 83% less than Alternative 2, 78 % less than Alternative 3 and 59 % less than Alternative 4. The preferred site is stated to be practicable by the applicant from a cost standpoint.

6.8.4 Logistics

The application explains that the proposed entrance to the distribution center at the Airpark site is approximately 2 miles from the I-95/Route 656 (Sliding Hill Rd) interchange. This allows trucks to access I-95 in an efficient manner (straight route), while minimizing the amount of time they would have to spend on local roads. Additionally, as part of the thoroughfare plan, Sliding Hill

Road has already gone through recent widening improvements, which helps eliminate the logistical challenges and costs of any further offsite road improvements such as those presented in the alternatives. The preferred site is practicable in terms of logistics.

6.8.5 Technology

The applicant did not identify any technological challenges associated with construction of the distribution center associated with the preferred site. The preferred site is practicable in terms of technology.

6.9 On-Site Alternatives

Numerous on-site layouts were examined to develop the regional grocery distribution center in a manner that avoids and minimizes impacts to environmentally sensitive areas to the maximum extent practicable, while meeting configuration requirements necessary to provide efficient long-term operation of the facility. The application states that the proposed facility components include Phase I construction of an approximately 1.1 million contiguous square feet (sq. ft) facility developed in a “L” shape that will house a dry warehouse, refrigerated warehouse, return center, food manufacturing facility, and offices, with the ability to expand with future growth, as well as parking and staging areas for tractor trailers, parking for associates, and ancillary support buildings (i.e. fleet maintenance, dispatch and site security). Appurtenant facilities such as parking and staging areas for tractor trailers, parking for associates, and ancillary support buildings (i.e. returning trailer cleanout & and site security) are necessary for operations. A near future Phase II expansion to approximately 1.3 million square feet that includes expansion of the dry warehouse and the temperature controlled warehouse. Phase III - future development/expansion of the distribution center will be constructed in accordance with county zoning which allows for a maximum buildout of 1.7 million square feet.

In designing the Wegmans Distribution Center campus in Hanover County, the application states that the best design and operational practices were considered from all previous and existing Wegmans facilities, and were incorporated resulting in the “L” shaped campus and implementation of cross docking. The Hanover County site was designed to maximize the efficiency of the site, to allow for the least amount of impact to identified surface waters and to limit the areas of disturbance where practicable.

Sections 5.0 and 6.0 of the application materials submitted on September 15, 2020 indicated that the preferred on-site alternative layout was determined to be the LEDPA, while meeting the needs of the proposed development. The preferred on-site alternative layout provides sufficient area to construct the proposed distribution center in such a way that serves to minimize surface water impacts, avoids encroaching on existing easements, and requires the least amount of cut and fill based on the existing percent slope.

Section 5.4 of the application materials submitted on December 2, 2019 describes an on-site alternative that was considered by the applicant, which would also realize the purpose and need of the project in the required configuration, but would have resulted in impacts greater than the proposed layout, thus also increasing mitigation costs. To reduce impacts, the applicant reconfigured the secondary access road from Ashcake Road.

In order to ensure that impacts to on-site surface waters (including wetlands) are avoided and minimized to the maximum extent practicable, the permittee must describe what specific measures were taken in

designing the project to accomplish that. The costs of the measures relative to the project scope are also considered in determining the LEDPA.

Information included in Section 6.0 of the application materials includes on-site techniques that were examined to further minimize impacts, including slope grading, and strict adherence to all state and local erosion and sediment control measures. The fill slopes will be graded to a 3:1 slope. A review of incorporating steeper slopes was analyzed, but given the high level of traffic anticipated for the proposed roadways, 3:1 slopes were utilized for the project in order to safeguard from potential slope failures. They also provide an increased level of safety for vehicles and pedestrians in the event that either leave the travel way. In response to a request for additional information, the applicant also provided information stating that because of flat nature of the site, there is little difference between the footprint of 2:1 slopes vs. 3:1 slopes. In areas where the proposed site grading diverges from the existing grades, tie-in slopes of 3:1 horizontal to vertical have been utilized to tie proposed grades to existing in a stabilized manner. A 3:1 tie-in slope has little erosion potential and alleviates maintenance concerns.

Staff requested an evaluation of a number of different on-site alternatives in the December 10, 2019 meeting. A response memo was received on December 13, 2019, documenting the analysis of access, parking, stormwater management, building footprint, and minimization of secondary impacts. The following summarizes the on-site avoidance and minimization documented in the December 13, 2019 memo.

- The building footprint could not be reduced by adding a vertical level because the proposed building heights are near the maximum allowable height based on municipal and zoning regulations. Additionally, the proposed configuration is the most efficient based on a review of other large scale distribution facilities in the industry and other similar facilities. Using a different layout would mean a less efficient operation and would also require a larger building to be built.
- The parking space allotment is dictated by the required employee parking spaces, as the facility will employ upwards of 700 people upon project completion, as well as the required truck and trailer access and facilities. While not all 700 employees will be working at the same time, during shift changes the parking facility will experience a high volume of traffic. The size of the parking facility is dictated by the number of employees onsite during peak shift change volume. There will be one primary access from Sliding Hill Road.
- Utility crossings have been designed within roadway crossings, where feasible, in order to reduce the number and area of impacts to surface waters. Additionally, the roadway crossings have been designed to cross perpendicularly to the surface waters and at the narrowest most points feasible. Care has been taken to design roadways, buildings and stormwater facilities so that they do not laterally impact the remaining wetland area located between Impacts 5 and 9A/9B.
- Due to the flat and expansive nature of the proposed site development, storm sewer pipes cannot daylight in the eastern areas of the site without globally raising the site grading in a way that makes earthwork unfeasible. Curb cuts are not desired as they would become quickly overtaxed by the 100% impervious contributing drainage area. Releasing drainage in this manner would likely create a quality compliance problem as curb cuts achieve zero pollutant removal. Additionally, curb cuts would also defeat the primary intent of the curb at this facility, which is to prevent trailers from being backed up into a light pole or the perimeter fence.

- The proposed stormwater facilities have been sized to provide compliance with the minimum requirements of the Virginia Stormwater Management Program and has been sited outside of the on-site jurisdictional wetlands. These requirements include energy balance, channel and flood protection. Additionally, the main stormwater management facility outflow has been designed to maintain and mimic existing drainage conditions to nearby Totopotomoy Creek. There are no other nearby surface waters anticipated to be impacted by proposed construction activities.
- The impervious areas proposed are all necessary for the adequate flow of truck traffic and personnel on-site during working hours. Parking spaces, drive aisles, and curbing is sited at the minimum offsets/spacing needed as directed by the distribution center end user.

Staff also reviewed the potential for secondary impacts to remaining unimpacted surface waters across the site. Due to stormwater requirements, post development flows on site have been reduced, resulting in the potential for secondary impacts due to diversion of storm water at Impacts 4A, 4B, 6, 18B, 20B, and 25B. This has resulted in 1.44 acres of forested wetland and 0.02 acre of jurisdictional ditch to be considered secondarily impacted due to a reduction of hydrology. These impacts are accounted for in the compensation package proposed by the applicant. Stormwater alternatives that were considered in the vicinity of Impacts 6, 18B, 20B, and 25B were to construct curb cuts, however, due to the size of the project and the amount of impervious area associated with a warehouse facility curb cuts were deemed infeasible. Impacts 4A and 4B are a result of a culvert being removed at Impact 3B. Due to the hydraulic nature of the culvert design, it was determined that a negative backwater effect would occur on the adjacent parcel. An alternative proposing a partial flow through a proposed culvert was considered, however the negative impacts to the adjacent parcel would still remain. The current proposed configuration at Impact 3B is the most efficient design to minimize offsite impacts to adjacent parcels.

Additionally, the remaining unimpacted wetlands adjacent to Impact Areas 8A/8B and 12-17 will be monitored to determine if there will be secondary impacts to the remaining wetlands at these locations. Monitoring of the remaining wetland areas will include data collection of hydrophytic vegetation, hydrology, soil samples, and photo documentation. A final wetland monitoring plan will be submitted to DEQ for review and approval no later than 60 days prior to the start of construction.

Staff requested the actual amount of surface waters to remain on-site and the applicant provided a response, which indicates that 15.1 acres of unimpacted surface waters will remain on-site. According to the applicant, the final proposed development plan represents the smallest practicable and best-oriented development that still meets the project's intended purpose and need.

Relevant information regarding the applicant's avoidance and minimization efforts can be found in the application as well as the additional information responses provided on December 13, 2019, December 20, 2019, February 14, 2020, March 12, 2020, September 15, 2020, September 22, 2020, and September 28, 2020.

Based upon staff review, the proposed plan represents the LEDPA and all unavoidable permanent impacts will be adequately mitigated through the proposed compensation plan.

7. Project Impacts:

This proposed permit authorizes the total impact to 14.85 acres of surface waters.

- Permanent fill impacts are to 12.99 acres of palustrine forested (PFO) wetland, 0.23 acre of palustrine emergent (PEM) wetland, and 0.14 acre of jurisdictional ditch.
- Secondary impacts, due to diversion of surface water, are to 1.44 acres of palustrine forested wetland and 0.02 acre of jurisdictional ditch.
- Temporary impacts are to 0.03 acre of palustrine emergent wetland.
- Authorized surface water impacts described under this condition shall be as depicted on the impacts map entitled “Wegmans Distribution Center, Hanover County, Virginia, Wetlands and Waters Impacts Map” dated September 8, 2020, last revised on September 24, 2020, and received October 7, 2020, and drawn by Timmons Group.

Impact Type	Surface Water Type	DEQ-Authorized Impact	Mitigation Ratio	Mitigation Required
		Acres		Wetland Credits
Permanent	Palustrine Forested Wetland (PFO)	12.99	2:1	25.98
	Palustrine Emergent Wetland (PEM)	0.23	1:1	0.23
	Jurisdictional Ditch	0.14	2:1	0.28
	<i>Subtotal</i>	13.36		26.49
Secondary	PFO	1.44	2:1	2.88
	Jurisdictional Ditch	0.02	2:1	0.04
	<i>Subtotal</i>	1.46		2.92
Temporary	PEM	0.03	N/A	N/A
	<i>Subtotal</i>	0.03		
Total		14.85		29.41

8. Compensation for Unavoidable Impacts:

Permanent forested wetland impacts, emergent wetland impacts, and jurisdictional ditch impacts resulting from fill activities will be compensated at a 2:1, 1:1, and 2:1 ratio, respectively. Secondary forested wetland impacts and secondary jurisdictional ditch impacts will be compensated at a 2:1 ratio. As compensation for permanent impacts, the permittee shall purchase 29.41 wetland mitigation credit(s). All compensatory mitigation credits shall be purchased from a DEQ approved mitigation bank, an approved in-lieu fee (ILF) program, or a combination thereof as specified below. The bank or program must be authorized and approved by DEQ to sell credits in the area in which the impacts will occur and have credits available (as released by DEQ). Any credit sale shall be in accordance with the approved Mitigation Banking Instrument or ILF Program Instrument. Purchase of required

mitigation credits shall occur first through the purchase of available released credits followed by the purchase of advance credits. Multiple banks may be used to fulfill compensation requirements.

Based on the information provided, the jurisdictional ditches on-site are no longer providing functionality with respect to drainage. With this, and due to the adjacency of the jurisdictional ditches to the palustrine forested wetlands on-site, the jurisdictional ditches will be mitigated for at a 2:1 ratio.

The compensation package complies with § 62.1-44.15:21 and § 62.1-44.15:23 of the Code of Virginia.

9. Site Inspection:

DEQ staff, Bryan Jones, attended a site meeting with Timmons Group and RK&K on August 26, 2019. DEQ staff, Bryan Jones, attended a jurisdictional wetland confirmation site visit with Ms. Elaine Holley, of the USACE, Timmons Group, and RK&K on October 16, 2019.

On August 19, 2020, DEQ staff, Bryan Jones, attended a site visit conducted by Corps representatives Ms. Holley, Dr. Herman W. Hudson III, and Mr. Steven VanderPloeg. Matt Neely, with Timmons Group also attended. On August 21, 2020, DEQ staff, Bryan Jones, attended a site visit conducted by Corps representatives Dr. Hudson, and Mr. VanderPloeg. Matt Neely, with Timmons Group also attended. During the August 19th and 21st, 2020 site visits, DEQ observed the field review activities as referenced in the additional information request letter from the U.S. Army Corps of Engineers (Corps), received via email on August 12, 2020. As a result of these site visits, a revised PJD was issued on September 15, 2020 and a Memorandum for The Record (MFR) was received by DEQ on September 24, 2020.

10. Relevant Regulatory Agency Comments:

As part of the application review process, DEQ contacted the appropriate state regulatory agencies. No comments received required a change to the VWP individual permit Part I - Special Conditions. Therefore, the staff anticipates no adverse effect on water quality and fish and wildlife resources provided the applicant adheres to the permit conditions.

Summary of State Agency Comments and Actions

By email/letter dated December 9, 2019, comments were requested from the following state agencies: Virginia Department of Wildlife Resources (DWR) (formerly DGIF), Virginia Department of Conservation and Recreation (DCR), Virginia Marine Resources Commission (VMRC), and Virginia Department of Health (VDH). Failure to provide comments within 45 calendar days of the DEQ request for comments infers that the agency has no comments on the project activities.

DCR

DCR provided the following comments in a memorandum dated December 18, 2019, and transmitted by email on December 18, 2019:

- According to the information currently in Biotics, natural heritage resources have not been documented within the submitted project boundary including a 100-foot buffer. In addition, the project boundary does not intersect any of the predictive models identifying potential habitat for natural heritage resources.

- DCR concurs with the negative survey results for this project from “Survey for Swamp Pink (*Helonias bullata*), Hanover County, Virginia” prepared on June 17, 2019 by Chris Ludwig, Seedbox Consulting.
- DCR recommends efforts to minimize edge in remaining fragments, retain natural corridors that allow movement between fragments and designing the intervening landscape to minimize its hostility to native wildlife (natural cover versus lawns).
- There are no State Natural Area preserves under DCR’s jurisdiction in the project vicinity. The current activity will not affect any documented state-listed plants or insects.

No response necessary.

Additional comments were requested from DCR on September 17, 2020. DCR provided the following comments in a memorandum dated September 23, 2020:

- According to the information currently in Biotics, natural heritage resources have not been documented within the submitted project boundary including a 100-foot buffer. In addition, the project boundary does not intersect any of the predictive models identifying potential habitat for natural heritage resources.
- DCR concurs with the negative survey results for this project from “Survey for Swamp Pink (*Helonias bullata*), Hanover County, Virginia” prepared on June 17, 2019 by Chris Ludwig, Seedbox Consulting.
- DCR recommends efforts to minimize edge in remaining fragments, retain natural corridors that allow movement between fragments and designing the intervening landscape to minimize its hostility to native wildlife (natural cover versus lawns).
- There are no State Natural Area preserves under DCR’s jurisdiction in the project vicinity. The current activity will not affect any documented state-listed plants or insects.
- Recommends coordination with DWR as this agency has regulatory authority for the management and protection of threatened and endangered species not documented by DCR.

Prior to comments received from DCR on September 23, 2020, staff most recently requested comments from DWR on the proposed project on September 17, 2020. No response necessary for remaining comments received from DCR on September 23, 2020.

DWR (previously DGIF)

DWR provided the following comments to DEQ by email dated January 27, 2020:

- DWR does not currently document any listed wildlife or designated resources under their jurisdiction from the project area. Therefore, DWR does not anticipate adverse impacts upon such species or resources to result from the proposed work.
- DWR recommended conducting any in-stream activities during low or no-flow conditions, using non-erodible cofferdams or turbidity curtains to isolate the construction area, blocking no more than 50% of the streamflow at any given time, stockpiling excavated material in a manner that prevents reentry into the stream, restoring original streambed and streambank contours,

revegetating barren areas with native vegetation, and implementing strict erosion and sediment control measures.

The special conditions of the proposed permit address these activities.

- DWR recommended that the permittee avoid and minimize impacts to undisturbed forest, wetlands, and streams to the fullest extent practicable to minimize overall impacts to wildlife and our natural resources. DWR also recommended maintaining undisturbed naturally vegetated buffers of at least 100 feet in width around all on-site wetlands and on both sides of all perennial and intermittent streams.

Staff reviewed the proposed impacts to surface waters and determined those proposed have been minimized to the maximum extent practicable.

- DWR recommended that the stormwater controls for this project be designed to replicate and maintain the hydrographic condition of the site prior to the change in landscape.

Oversight of stormwater management and erosion and sediment control measures is the responsibility of DEQ-Stormwater Management or the locality, if such responsibility has been delegated. Any such requirements will be implemented under the oversight of that program.

- DWR recommended that all tree removal and ground clearing adhere to a time of year restriction protective of resident and migratory songbird nesting from March 15 through August 15 of any year.

This time of year restriction was not included in the proposed permit as it is not associated with a threatened or endangered species. The recommendation was forwarded to the permittee for their consideration.

- DWR recommended coordination with the USFWS regarding potential impacts upon federally Threatened northern long-eared bats associated with tree removal.

The project is being reviewed by the USACE for an individual permit and coordination with the USFWS will occur under federal coordination procedures.

- DWR recommended adherence to erosion and sediment controls during ground disturbance. To minimize potential wildlife entanglements resulting from use of synthetic/plastic erosion and sediment control matting, we recommend use of matting made from natural/organic materials such as coir fiber, jute, and/or burlap.

Oversight of stormwater management and erosion and sediment control measures is the responsibility of DEQ-Stormwater Management or the locality, if such responsibility has been delegated. Any such requirements will be implemented under the oversight of that program.

Additional comments were requested from DWR on September 17, 2020. DWR responded via email on September 21, 2020 stating that there are no concerns regarding the proposed changes to the subject project and that the previous project comments remain valid.

VDH

VDH provided the following comments in a memorandum dated December 10, 2019, and transmitted by USPS received on December 13, 2019:

VDH stated no public raw water intakes were found, in the Commonwealth, downstream from the Project Tiger (Wegmans Distribution Center) area.

No response necessary.

VMRC

VMRC provided the following comments in a letter dated and transmitted by email on December 16, 2019:

After completion of the JPA review process, a No Permit Necessary determination was issued by the VMRC on December 11, 2019, given that no impacts under their jurisdiction were proposed. As such, the VMRC has no objection to DEQ's issuance of a VWP individual permit.

No response necessary.

11. Riparian Landowner Notification:

Staff notified 41 riparian landowners located adjacent to the impact area and within one-half mile downstream of each distinct impact area by letter dated December 10, 2019. Two responses were received:

1. On December 20, 2019, Ms. Betty Lozano called regarding a potential cemetery on-site; this information was forwarded to the USACE.
2. On February 14, 2020, Ms. Polly Vaughan called asking for the USACE project manager contact name and asked to be notified when the Public Notice is published. She expressed potential concerns regarding stormwater runoff towards her property at GPIN 7798-67-7448.

Notifications of riparian and adjacent landowners were conducted in accordance with DEQ's Guidance Memorandum No. 11-2005 (Revised Local Government, Riparian Property Owner, Adjacent Property Owner or Resident, and General Public Notification Procedures for VPDES, VPSA and VWP Permit Applications and Draft Permits).

12. Public Comment and Public Hearing:

The public notice was published in the Richmond Times Dispatch on March 31, 2020. The public comment period ran from March 31, 2020 to April 30, 2020.

DEQ received 119 comments, 117 from private citizens, 1 from a non-profit organization, and 1 from an attorney representing interested citizens. Of the comments, 3 supported the proposed permit, 115 opposed

it, and 1 did not provide an opinion. One-hundred ten commenters requested a public hearing and 53 requested the denial of the VWP individual permit.

As a result of public interest, authorization to hold a public hearing was granted on May 21, 2020. A public hearing comment period of 45-days was published in the *Richmond Times-Dispatch* on June 20, 2020 and ended on August 5, 2020. A public hearing was held on July 20, 2020. DEQ received 251 comments, 243 from private citizens, 4 from non-profit organizations, and 3 from attorneys representing the interest of various associated parties. A joint letter opposing the project was submitted by the following signing parties: Protect Hanover, Brown Grove Preservation Group, Chesapeake Legal Alliance, Brown Grove Baptist Church, Virginia Environmental Justice Collaborative, Virginia League of Conservation Voters, Green New Deal Virginia, Sunrise Richmond, Falls of the James Group, Virginia Poor Peoples Campaign, AMMD Pine Grove Project, Clean Water Action, United Parents Against Lead & Other Environmental Hazards; Partnership for Smarter Growth, Virginia Network for Democracy and Environmental Rights, Center for Sustainable Communities, Coalition for Hanover's Future, and Center for Progressive Reform. Of the comments, 4 supported the proposed permit and 247 opposed it.

Comments received during the comment periods opposing the proposed permit contained similar concerns regarding the following:

- Insufficient wetland delineation
- Insufficient analysis for off-site alternatives and LEDPA determination
- Insufficient analysis of secondary impacts to adjacent wetland systems
- Concerns about increased flooding and proper stormwater management from the site
- Concerns regarding historic resources on the proposed site, including graves
- Lack of proposed compensation for impacts to Open Water Jurisdictional Ditches on site
- Inadequate consideration of Environmental Justice issues
- Water quality impacts to downstream waters
- Potential for Threatened & Endangered Species on the proposed site
- Lack of impact analysis on RPA/RMA in accordance with the Chesapeake Bay Preservation Act
- Other concerns including county proffers, traffic congestion, noise pollution, 24/7 operations, etc.

As a result of public comments, the Corps reviewed and ultimately revised the PJD for surface waters at the proposed site. The revised PJD resulted in increases to proposed surface waters impacts on site and compensatory mitigation requirements. Staff also re-evaluated the potential for secondary (hydrology) impacts on site and the determination of an open water exclusion for jurisdictional ditches. Due to these changes, a joint public comment period and hearing was advertised to allow for public comments on the revised proposed permit. The following comments were received during the joint comment period and hearing:

[INCLUDE SUMMARY OF COMMENTS HERE]

13. Special Conditions:

The following conditions were developed to protect instream beneficial uses, to ensure compliance with applicable water quality standards, to prevent significant impairment of state waters or fish and

wildlife resources, to provide for no net loss of wetland acreage, and to provide no net loss of functions in all surface waters through compensatory mitigation and monitoring and reporting.

Section A Authorized Activities

Nos. 1-3 addresses the activities authorized by the permit, including impact types and totals.

Section B Permit Term

Nos. 1-2 addresses the permit term and re-issuance process to ensure that all permit conditions are completed.

Section C Standard Project Conditions

No. 1 addresses the requirement for the minimization of adverse impacts to instream beneficial uses.

No. 2 ensures that the project will be executed in a manner that limits the disruption of the movement of aquatic life.

No. 3 ensures that downstream flows will be maintained to protect both instream and off-stream beneficial uses.

No. 4 ensures the minimization of adverse effects on navigation.

No. 5 ensures the passage of high flows.

No. 6 requires maintenance of continuous flow of perennial springs for the protection of instream beneficial use.

No. 7 ensures that dredging and filling operations will minimize stream bottom disturbances and turbidity.

No. 8 requires instream activities to be conducted during low-flow conditions to protect instream beneficial uses.

No. 9 requires that erosion and sediment controls are designed and maintained in accordance with Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.

Nos. 10 through 12 provide requirements and limitations on the entry of various materials (including concrete, fill, construction and waste material, fuels, lubricants, and untreated stormwater runoff) into state waters.

No. 13 limits the use of machinery and equipment in surface waters to protect beneficial uses.

Nos. 14 through 19 require temporary disturbances to surface waters during construction to be avoided and minimized to the maximum extent practicable and the restoration of such temporary disturbances.

No. 20 prohibits the violation of Water Quality Standards in surface waters as a result of project activities.

No. 21 requires the identification of all non-impacted surface waters in the vicinity of the proposed activity to prevent unpermitted impacts.

Nos. 22 through 26 set forth all reporting requirements concerning construction, monitoring, compensation, and restoration as required by current law and regulations.

Section D Installation of Utilities

No. 1 requires the minimization of disturbance to surface waters and restoration to preconstruction conditions following utility line installation.

No. 2 sets a 90-day time limit for temporary sidecasting during trench excavation to minimize impacts to surface waters.

No. 3 provides the requirements for trench construction to avoid the drainage of surface waters.

Section E Road Crossings

No. 1 provides specifications for access road construction to minimize adverse effects to surface waters.
No. 2 ensures pipes and culvert construction is conducted in the dry to protect water quality and wildlife habitat.

No. 3 requires that temporary impacts be restored immediately following construction to minimize impacts to water quality and fish and wildlife resources.

Numbers 4-7 in this section of the template Special Conditions were not included in the permit because no streams were classified within the project limits.

Section F Stormwater Management Facilities

No. 1 defines the general requirements for stormwater management facility construction to minimize adverse effects to aquatic resources and provide for long-term aquatic resources protection and enhancement.

No. 2 provides limits and guidance for maintenance excavation to avoid unpermitted impacts to surface waters.

No. 3 requires correct draining methods to minimize sedimentation of surface waters.

Section G Project Construction Monitoring and Submittals (Impact Sites)

Nos. 1 through 6 address monitoring and submittals required for pre-construction, during construction and post-construction for the impact areas on site.

Section H Compensatory Mitigation

No. 1 describes the compensatory mitigation required to mitigate for the permitted impacts.

Nos. 2 and 3 describes the hierarchy of credit sources.

No. 4 describes the documentation requirement for the purchase of the required amount of credits.

Section I Project Wetland Monitoring and Submittals (Remaining Wetlands)

This section was added to monitor wetland conditions within the remaining wetland areas directly adjacent to Impact Areas 8A/8B, 12, 13, 14, 15, 16, and 17. Nos. 1 through 4 lists the requirements for monitoring of these wetland areas being monitored for secondary impacts and the requirements for the associated report submittals and notifications.

Sections of the template Special Conditions that were not included in the permit are: Projects Involving Stream Modifications, Including Intake/Outfall Structures; Projects Involving a Golf Course; Projects Involving a Marina; Dredging Activities; On/Off Site Creation, Restoration, and/or Preservation Standard Conditions; Wetland Compensation Site Construction Tasks, Monitoring, and Submittals; Stream Compensation Site Construction Tasks, Monitoring, and Submittals.

14. General Conditions:

The general conditions specified in the effective VWP Permit Program Regulation 9VAC25-210 apply to all VWP individual permits.

15. General Criteria (9VAC25-260-20.A):

State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life.

Specific substances to be controlled include, but are not limited to: floating debris, oil, scum, and other floating materials; toxic substances (including those which bioaccumulate); substances that produce color, tastes, turbidity, odors, or settle to form sludge deposits; and substances which nourish undesirable or nuisance aquatic plant life. Effluents which tend to raise the temperature of the receiving water will also be controlled. Conditions within mixing zones established according to 9VAC25-260-20.B do not violate the provisions of this subsection.

16. Staff Findings and Recommendations:

- The proposed activity is consistent with the provisions of the Clean Water Act and State Water Control Law, and will protect instream beneficial uses.
- The proposed permit addresses avoidance and minimization of wetland impacts to the maximum extent practicable.
- The effect of the impact, together with other existing or proposed impacts to wetlands, will not cause or contribute to significant impairment of state waters or fish and wildlife resources.
- The proposed permit conditions address no net loss of wetland acreage and no net loss of functions in all surface waters, through compensatory mitigation via the purchase of wetland credits and reporting.
- The proposed permit reflects the required consultation with and full consideration of the written recommendations of VMRC, VDH, DCR, and DWR.

Staff recommends VWP Individual Permit No. 19-2036 be issued as proposed.

17. Action by the State Water Control Board

[ADD SWCB ACTION]